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Family Economics Review

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Issued May 1988

Consumer Spending and Saving: The Outlook for 1988¹

By Colien Hefferan and Joyce Matthews Pitts
Economist and Home economist

In the fall of 1987, the United States entered its sixth year of sustained economic expansion. Growth in the Gross National Product (GNP) declined to a 2.5% annual rate, down from a 4.8% annual rate at the beginning of the year. However, other measures such as real final sales and consumer spending continued strong, registering 6.2% and 4.8% annual increases, respectively.² Despite these indicators of economic health, the outlook for 1988 is clouded by uncertainty resulting from a precipitous decline in stock prices, uneasiness with the growing trade and Federal budget deficits, and the complexity of international monetary and exchange relationships.

The outlook is confounded further by difficulty in forecasting consumer response to changing economic conditions. Consumer spending comprises two-thirds of the economic activity in the United States; it has driven much of the economic growth in recent years. The question for 1988 is whether consumers can sustain spending levels sufficient to continue fueling economic expansion.

This paper reviews the economic conditions and trends influencing consumer spending and saving. Spending is determined by both ability and willingness to buy. Thus, consumer prices, income and employment, and access to credit, as well as confidence and expectations, are reviewed. Saving is determined by the relationship of current household needs to resources; returns available in the market, particularly interest rates;

and expectations for the future. The paper, therefore, includes a brief review of factors and constraints that influence saving.

Spending

Consumer spending moderated in October 1987 after increasing steadily during the summer months. Most of the decline is attributable to flat auto sales as manufacturers and dealers discontinued sales incentive programs at the start of the new model year. However, some components of consumer spending were inexplicably strong during the month. Sales of existing homes climbed 3.2% during October despite rising mortgage rates early in the month and the stock market decline later.

Month-to-month changes in spending may not accurately reflect underlying trends, however. Many components of consumer spending move in response to external conditions, such as weather. For example, August expenditures for services moved up sharply, probably the result of high utility bills generated by a widespread heat wave. Expenditures for many other items, such as small household appliances and gifts, children's clothes and toys, and vacation travel, tend to vary by season of the year or with cultural norms.

Despite month-to-month swings in consumer spending, the long-term trend has been toward increased spending both in inflation-adjusted dollars and as a proportion of income. Between 1981 and 1987, consumption increased an estimated 2 percentage points as a share of the total family budget for those at the lowest and the highest budget levels. In 1981 families at a low level of consumption used 79% of their budget for consumption needs; in 1987 consumption will claim about 81% of these families' budgets. For families at a higher level of consumption, the increase between 1981 and 1987 is estimated to be from 65% to about 67% of the budget.³

Increases in consumer spending have been driven by different commodities during the past several years. In 1985 and 1986,

³ For details see Hefferan, Colien, Family budget guidelines, Family Economics Review 1987(4):1-9.

¹ This article is adapted from a paper presented at the Annual Agricultural Outlook Conference in December 1987 in Washington, DC.

² Estimates of GNP and its components are published monthly in the Survey of Current Business, U.S. Department of Commerce, Bureau of Economic Analysis.

spending for durable goods spiked upward reflecting rapid increases in the number of new households, demand deferred from recession years early in the decade, and currency exchange rates that made imported cars and electronics relatively inexpensive. In 1987 services led increases in consumer spending. Spending for durable goods is likely to moderate in 1988, but spending for services is projected to continue to increase. Similarly, services are likely to claim an increasing share of total consumer expenditures through the end of the decade as both prices and demand rise.

Prices and their rate of change are primary determinants of consumer spending. The Consumer Price Index for All Urban Consumers (CPI-U) rose at an annual rate of 4.7% in October 1987.⁴ After subdued inflation in 1986 (the CPI-U rose only 1.1%), some commodities registered sharp upturns early in 1987. For example, energy prices, which declined 19.7% in 1986, increased at an annual rate of 16.7% during the first 6 months of 1987.

Food prices have increased slightly more rapidly in 1987 than in 1986, led by increases in prices for red meat and fresh fruits and vegetables. However, shelter costs have increased at about the same rate in 1987 as in 1986, initially led by rising house prices and later influenced by increasing financing costs. Overall, inflation across commodities has been relatively even in 1987 without the wide variation in price increases that characterized past years. This suggests there may be less opportunity for substitution across price-elastic products and consequently less price-induced distortions in consumer spending patterns.

Perhaps because inflation jumped significantly in 1987 above its historically low level in 1986, there is some evidence of renewed concern that prices may be poised for a sharp increase in 1988. A proliferation of special price indices composed of selected components of the consumer market basket have found a place in the public

debate about inflation. These indices (including a "nuisance index" that prices items such as movie tickets, fast food meals, and bus fares) show large increases in the prices of these highly visible and frequent purchases. The special indices typically do not show the total array of costs faced by consumers, however.

Although inflation remains a concern, consensus forecasts suggest the CPI-U will rise between 4% and 5% in 1988, about the same rate of increase as in 1987. Prices of durable goods, led by Japanese and European autos and electronics, may rise more rapidly than the overall index, reflecting the weakening U.S. dollar. Housing, transportation, and labor-intensive service costs, on the other hand, may moderate in 1988 in response to a general economic slowdown.

Income is the second important influence on consumer spending. Consumers are entering 1988 with the benefit of almost 6 years of sustained growth in income. Since 1982 real personal income has increased 14%; the rate of increase has escalated over the period. In October 1987 nominal personal income rose 1.7%, the largest monthly advance since June 1975. Although much of this increase was due to a one-time surge in Government farm subsidy payments, the long-term pattern of income growth has been consistent and strong.

The components of personal income have grown at uneven rates, however. The relative gains made in the early eighties by older households and others dependent on Government transfer payments have moderated during the past 2 years. As pressures to reduce the Federal budget deficit intensify, government transfer payments are unlikely to increase in real terms in 1988. Similarly, growth in income from other nonearned sources such as proprietor's income and interest income has slowed relative to growth in earned income including wages and salaries. Except for short-term swings caused by cost-of-living adjustments to Federal retirement and income support programs and by pay-out schedules for farm subsidy programs, the trend toward more rapid growth in earned than nonearned income is likely to continue through the remainder of the decade. This indicates that the income position of households headed by current wage and salary earners, especially

⁴ Monthly CPI-U data are published in News and the CPI Detailed Report, U.S. Department of Labor, Bureau of Labor Statistics. Current CPI information is also available via taped telephone message at 202-523-1239.

those with 2 earners, will improve relative to households with no earners. This will expand the already wide gap in income between households headed by earners and those headed by nonearners.

Data on family income lag that available on aggregate personal income. Nonetheless, information on family income for 1986 (the latest year for which data are available) supports the trends suggested in the aggregate data. Overall, median family income grew 4.2% (adjusted for inflation) from 1985

to 1986. Income growth was especially strong among black and Hispanic married-couple households, those living in the South, and farm households. Female-headed households, on the other hand, suffered a 2.0% decline in real income between 1985 and 1986.

Table 1 shows the level of income and the percent change in real money income from 1985 to 1986 for selected household types.

Growth in employment parallels growth in income. In October 1987 civilian employment reached 113.2 million. During the prior 12

Table 1. Comparison of median family money income in 1986 and 1985, by selected characteristics

Characteristic	Median family income			Percent change in real money income
	1986	1985		
		Constant dollars (1986)	Current dollars	
All families	\$29,458	\$27,735	\$28,269	4.2
Race of householder:				
White.....	30,807	29,148	29,713	3.7
Black	17,604	16,784	17,109	2.9
Spanish origin ¹	19,995	19,024	19,393	² 3.1
Region:				
Northeast	32,160	30,544	31,132	3.3
Midwest	29,584	27,930	28,467	3.9
South	26,708	25,077	25,560	4.5
West	30,965	29,778	30,351	2.0
Type of family:				
Married-couple family.....	32,805	31,100	31,698	3.5
Wife in paid labor force	38,346	36,431	37,110	3.3
Wife not in paid labor force	25,803	24,556	25,029	3.1
Male householder, no wife present...	24,647	22,622	22,751	8.3
Female householder, no husband present	13,647	13,660	13,923	-2.0
Farm status:				
Farm	23,326	21,853	22,273	4.7
Nonfarm.....	29,632	27,881	28,417	4.3

¹ Persons of Spanish origin may be of any race.

² Not statistically significant at .05 level.

Source: U.S. Department of Commerce, Bureau of the Census, 1987, Money Income of Households, Families, and Persons in the United States: 1986, Current Population Reports, Consumer Income, Series P-60, No. 157.

months, employment grew by 3 million, with adult women accounting for 1.5 million; adult men, 1.4 million; and teenagers, 120,000. Gains in employment were matched by large increases in the labor force. Thus, although employment grew, unemployment remained essentially unchanged, hovering near 6% throughout 1987. Some segments of the workforce continue to experience very high levels of unemployment. In October the unemployment rate was 17.4% for teenagers; 12.0% for blacks; and 7.9% for operators, fabricators, and laborers. At the same time, unemployment was relatively low for other groups such as adult males (5.1%), adult females (5.2%), and managerial and professional workers (2.7%).

The average duration of unemployment declined to 14.3 weeks in October 1987. Similarly, the likelihood of a household experiencing unemployment among one or more of its members sometime during the year declined from one in five early in the decade to an estimated one in seven in 1987. These factors influence both the amount of income and the level of confidence households bring to spending decisions.

As income and employment have risen, the number of persons in poverty has declined. In 1986 (the latest year for which data are available) the poverty rate was 13.6%, with 32.4 million persons below the poverty line. Although not significantly different from the 1985 figure, the number of poor was significantly below the decade peak of 35.3 million reached in 1983 when the rate was 15.2%. The gap between the poverty status of children and the elderly, which first emerged in the early eighties, widened in 1986. The poverty rate among those 65 years of age and older was 12.6%, whereas the rate for children 18 years and younger was 17.1%. For children 6 years and younger, the rate was even higher, approaching 22%.

The growing incidence of poverty among children is closely linked to the low (and in 1986, declining) income in households headed by women. As the poverty thresholds that will determine eligibility for participation in Federal assistance programs in 1988 rise to reflect 1987 price increases, more single mothers and their children are likely to fall below the poverty line. (See table 2 for the 1987 poverty guidelines.)

Table 2. Federal poverty income guidelines for 1987

Size of family unit ¹	Poverty guidelines		
	Contiguous (48) States and District of Columbia	Alaska	Hawaii
1	\$5,500	\$6,860	\$6,310
2	7,400	9,240	8,500
3	9,300	11,620	10,690
4	11,200	14,000	12,880
5	13,100	16,380	15,070
6	15,000	18,760	17,260
7	16,900	21,140	19,450
8	18,800	23,520	21,640

¹For family units with more than 8 members, add the following amount for each additional family member: \$1,900 (contiguous States and the District of Columbia); \$2,380 (Alaska); \$2,190 (Hawaii).

Source: U.S. Department of Health and Human Services, Social Security Administration, 1987, Social Security Bulletin 50(10):2.

The poverty population changes from year to year as households experience critical events with economic consequences--unemployment, illness, and divorce, for example. Households with just one adult available to work are especially vulnerable to economic crises. Continued growth in the number of children living in such households suggests that childhood poverty may become more pervasive during the remainder of the decade.

Credit exerts a strong influence on consumer spending, particularly for durable goods, autos, and housing. Consumer and mortgage credit continued to expand in 1987, extending a 6-year trend. In August consumers increased their installment credit by almost \$5 billion, bringing the total outstanding to just under \$600 billion. Also, consumers hold about \$2.8 trillion in mortgage debt. Although credit spending and new mortgages slowed somewhat in October 1987, there is little evidence to suggest borrowing will decline sharply as the availability and cost of credit improves in coming months. However, growth in credit is likely to moderate in 1988 as fewer new households are formed and as consumer demand for durables is tempered by rising prices. The composition of the consumer debt portfolio also may change with growth in mortgage-backed credit substituting for some installment credit.

Interest rates paid by consumers declined during the first 2 quarters of 1987, increased during the third quarter, and began to decline again in the final quarter. The average rate for a 48-month new car loan offered by commercial banks was 10.23% in May 1987, compared to 11.33% in 1986. By August 1987 the rate had increased slightly to 10.37%. Conventional mortgage rates declined from 9.53% in January 1987 to 9.11% in April, compared to 10.54% in 1986. Although mortgage rates began to climb in May, in recent months they have declined slightly. This trend is projected to continue in 1988 with both installment credit and mortgage rates dropping between 1/2 and 1-1/2 percentage points.

New housing starts, as well as sales of existing and new houses, respond quickly to changes in interest rates. For example,

housing starts dipped to a 1.6 million annual rate in May 1987, down from about 1.8 million in February. Auto sales also move with interest rates. Sales spiked in August when auto manufacturers and dealers implemented discounted loan rates; sales slumped in October when the promotions were discontinued.

Other types of consumer credit, especially credit cards, appear to have less influence on spending levels but significant impacts on financial management practices. Analyses of the 1983 and 1986 Surveys of Consumer Finances sponsored by the Board of Governors of the Federal Reserve System indicate that although consumer installment debt, particularly credit card debt, has expanded substantially, debt service payments have not risen commensurate with this growth.⁵ This suggests that consumers may be using credit cards as a convenient medium for transactions, incurring debt that is reflected in a high debt-to-income ratio (about 19.7% in 1987) but paying the debt quickly. Debt burdens of families also vary considerably over time, suggesting credit may be used to align needs with expected income. The surveys show that families with heavy debt burdens may reduce their ratio of payments-to-income by increasing their income. In other words, families may meet their needs during low-income periods by using credit, which is subsequently paid off when income rises (demonstrating life-cycle income management). Finally, the surveys show that 80% of the families holding installment debt have sufficient financial assets and home equity to cover their debts.

Confidence is the final critical determinant of consumer spending. Confidence indices summarize the psychological and potential behavioral impact of political, social, and financial events that may influence consumer choices. The decline in stock prices that began in late August 1987 and culminated in the October 19, 1987, stock

⁵ See Avery, Robert B., George E. Elliehausen, and Arthur B. Kennickell, 1987, Changes in consumer installment debt: Evidence from the 1983 and 1986 Surveys of Consumer Finances, Federal Reserve Bulletin 73(10):761-778.

market crash is an event likely to alter consumer confidence. Spending and other economic decisions of consumers, regardless of the direct or immediate consequences experienced from the actual event, are likely to respond to changes in confidence.

The Index of Consumer Sentiment, a reliable precursor of economic activity, particularly retail sales, plummeted to 82.4 after the October decline in stock prices.⁶ In September the index registered 93.6, indicating consumers were about 94% as confident in business and financial conditions then as in 1966, the base year for the index. The index ebbed to 54 during the 1980 recession and reached 99.3 as recently as June 1986.⁷

Confidence is influenced by broad economic conditions and personal economic circumstances, as well as specific events. It is difficult to predict the course of consumer confidence for 1988; however, most factors influencing the economic environment in early and mid-1987 remain salient today. Depending on how consumers weigh the range of factors determining their economic fate, confidence may quickly rebound in 1988.

Saving

Consumer saving rose to 4.7% of disposable personal income in October 1987, up from 3.0% in the previous month. Despite the increase, saving will average about 3.2% of disposable personal income in 1987. This is

⁶The index is collected as part of the Survey of Consumer Attitudes by the Institute for Social Research, University of Michigan.

⁷Other indices show similar pictures of consumer confidence. The industry-supported, nonprofit Conference Board's Consumer Confidence Index fell from 116.9 to 110.4 (1986 is the base year) immediately following the stock market plunge. The Sindlinger Consumer Confidence Survey showed a similar decline. The Sindlinger survey, conducted by a private Pennsylvania-based research firm, distinguishes attitudes of stock investors from noninvestors. Predictably, investors are significantly less optimistic than noninvestors.

a significant decline from the 4.2 percent rate registered in 1986 and a precipitous drop from the 6% to 9% rates through the early eighties.

Many explanations are proffered for the decline in saving. Demographic changes, including the baby boom generation's aging to the prime spending years and increasing numbers of two-earner families for whom jobs may substitute for the financial security engendered by savings, lead the theories. Also, consumer saving tends to move in a counter-cyclical pattern. During periods of economic expansion, consumers respond by increasing spending and acquiring debt. During downturns, consumers retrench, reducing spending and credit use. The current low rate of saving may be characteristic of the sustained economic expansion extending through the fall of 1987. As economic uncertainty prevails in early 1988, saving is expected to rebound.

Although consumer wealth declined in October 1987 from the high levels reached midyear, overall household net worth remained strong in 1987. Net worth equaled about 375% of annual disposable income at the beginning of 1987, up from about 350% in 1986. The total impact of the decline in stock values is difficult to estimate. Stock values, in the form of corporate equity holdings or pensions, represent about 20% of household assets. Many assets were quickly shifted from stock investments to other instruments. Regardless of how assessed, household net worth probably did not decline below the levels registered at the start of 1987. Home equity, savings accounts, and small businesses and farms continue to provide the base of household portfolios. These assets are likely to increase in relative importance to consumers in 1988.

Some consumers may be surprised to learn that their portfolio has changed during 1987, not only in value, but also in composition. For example, workers holding pensions that are invested in equities may find retirement resources diminished. Those holding balanced mutual funds and related

instruments, such as managed Individual Retirement Accounts, may find that they now hold more bonds than stocks. For many individuals, investments either declined or failed to grow at expected rates. This may further support the "flight to quality" in consumer saving and investing that was evident immediately following the stock decline. Billions of dollars moved from high-risk equity investments to low-risk, often insured, savings instruments. Movement toward secure liquid investments is likely to continue in 1988.

Interest rates available to consumers were volatile in 1987. This pattern is projected to continue in 1988 with rates averaging about the same as in 1987. The pattern of returns may reverse, however, with rates peaking early in 1988 rather than late, as in 1987.

Outlook for 1988

Growth in consumer spending is projected to slow in 1988 to about 3%, compared with almost 5% in 1987. Three factors have been identified that will contribute to this. First, income growth, particularly nonearned income, will slow in 1988, reducing resources available for consumption. For example, the stock market decline may reduce consumer spending from wealth. Assuming a \$900 billion loss in stock values coupled with a 5% propensity to consume from wealth, spending will decline about \$45 billion.

Second, consumer credit will moderate as the result of a slowed rate of increase in new household formations and in response to tempered demand for durable goods. This will defer consumption as some consumers may elect to save in 1988 for future purchases (of perhaps relatively less expensive goods) rather than borrow to satisfy current wants and needs.

Third, confidence is uncertain, suggesting caution on the part of consumers as they formulate spending plans. The quantitative impact of this factor is difficult to estimate.

Changes in consumer spending are unlikely to be similar across all types of households. Linking spending data for different types of households (as measured in the Consumer Expenditure Survey) to aggregate income and consumer confidence patterns suggests several demographic groups most likely to alter their spending and saving. The first group is high-income households who are most likely to hold equity investments and therefore most likely to have experienced a decline in assets in October 1987. Households in the highest income quintile hold 80% of stock equity. These households have a relatively low average propensity to consume; however, the items they consume out of unearned income may be discretionary and, therefore, deferred in 1988. In so far as these high-income households wield disproportionate spending clout, changes in their behavior will significantly influence overall consumer spending levels.

A second group likely to alter spending and saving plans in 1988 is households headed by persons nearing retirement. These households have relatively high asset holdings and potential access to unearned income. They will be faced with the double concern of moderating levels of Federal income-support programs and uncertainty over asset income. Plans for the timing and style of their retirement may be reassessed in 1988.

Consumers will enter the end of the decade in an objectively strong economic position, beneficiaries of sustained growth in income, moderating prices, and high levels of assets. Consumer confidence may be battered by broad concerns, however, resulting in increasing caution manifested by lower growth in spending and high levels of saving.

Note: For trends to watch in 1988, see pp. 8-9.

TRENDS TO WATCH IN 1988

Fast Financial Transactions

A new law, the Competitive Equality Banking Act of 1987 (P.L. 100-86), includes a provision that requires fast check clearing. By September 1, 1988, no more than 2 or 6 business days (for local and nonlocal checks, respectively) may elapse between the day a check is deposited and the day the funds become available for withdrawal. This will change to 1 day for local and 4 days for nonlocal checks on September 1, 1990. Also, there soon may be fast mortgage processing. Lenders have been experimenting with fast loans for borrowers with excellent credit and large cash reserves. These loans typically take 10 to 15 days from application to closing. Lenders will check credit histories but may accept pay stubs and bank deposit statements to verify income, assets, and liabilities. With a very large downpayment, borrowers may not be required to provide income or employment verification.

Consumer Credit

A bill to set a Federal cap on credit card interest rates seems unlikely to win congressional approval. However, credit card companies may be required to disclose interest rates, grace periods, and annual fees in advance to card applicants, making it easier for consumers to compare rates. Congress has also been reviewing open-ended home equity lines of credit. Additional disclosure and advertising requirements may be established for loans that are secured by a borrower's home. In the area of mortgage finance, the Federal Reserve Board has proposed limiting the extent to which the interest rate of an adjustable rate mortgage can rise over the life of a loan.

Child Care

Congress is addressing the problem of child care availability and costs. Several bills recently introduced would provide funding to improve the child care industry as a whole through higher paid and better educated staff, innovative programming designed for the needs of the area serviced by a center, and tax breaks for family day care providers. There is also good news for single parents. A new program that collects delinquent child support payments from income tax refunds resulted in a record number of

payments being received in 1986. A trend towards improved child support payments may result from a law which mandated States to have uniform support guidelines in place by October 1, 1987. Also, children should benefit from a bill on parental leave introduced in Congress early in 1987 requiring companies with more than 50 employees to allow male and female workers up to 10 weeks of unpaid leave for the care of their children and other family members.

College Costs

College costs may become easier to manage. Congress is considering legislation that would exclude income from U.S. savings bonds from an individual's gross income if the money is being transferred to an educational institution as payment for tuition and fees. Tuition prepayment plans are being offered by some private colleges and a few States for their State colleges and universities. These plans allow parents of young children to pay for college education now, at current tuition levels. Also, it is likely that more students, encouraged by prospects of close-to-full employment in the future, will acquire loans to pay for their own education.

Elder Care

Several trends are developing that may benefit the elderly and family members who care for them. The health insurance industry is working on plans that would make it easier for the elderly to receive at-home and nursing-home care. Congressional legislation has also been introduced that would provide long-term home care benefits under the medicare program and allow elderly persons with mounting nursing-home bills to keep more of their assets and still receive medicaid assistance. Also, private companies are beginning to offer employees time off, flexible working hours, and company-sponsored day care centers for the care of their elderly parents.

Portable Pensions

Congress has passed legislation that will reduce the time from 10 years to 5 years that workers need to be in a job before their pension is vested. Now legislators are considering ways to make pensions portable from one job to another throughout an employee's career. One bill under consideration would require employers to deposit an amount equal to the current value of a departing employee's current pension value in an IRA-type account where the money could earn tax-free interest.

Recent Trends in Clothing and Textiles¹

By Joan C. Courtless
Family economist

Clothing Expenditures and Prices

In 1987 prices for apparel commodities, as measured by the Consumer Price Index (CPI), rose 7.3% over 1986 (table 1). This is the third consecutive year in which the rate of increase in clothing prices was greater than that for the overall CPI. Women's dresses (up 29%) and suits (up 18%) led the increase in clothing prices; other items registering increases over 10% include men's shirts, women's coats and jackets, and women's separates and sportswear. The CPI was revised effective with the January 1987 index and reflects changes in consumer spending patterns that have occurred over time. Specific apparel groups that have less weight in the revised index are men's suits, sports coats, coats, and jackets; and sewing materials, notions, and luggage.

Annual spending for clothing and shoes in 1987 is estimated at \$724 per person according to preliminary figures for the first three quarters of 1987 (table 2, p. 12). This amount exceeds 1986 spending by \$29 per person; 90% of this increase can be attributed to higher prices and 10% to increased buying. When the effect of inflation is removed, the percentage of personal expenditures for clothing and shoes shows a small, gradual increase since 1982 (indicated by constant dollars in table 2). In current dollars, however, this share has remained at 6.0% for the last 5 years. Per capita expenditures for clothing and shoes during this period has increased by \$188; about 65% of this increase can be attributed to increased buying on the part of consumers. The large baby boom cohort (approaching peak earnings potential) and vast numbers of women in the

labor force² contribute to this real increase in clothing purchases.

Trade in Textiles, Apparel, and Footwear

In 1987 the United States recorded its 32d consecutive annual textile and apparel trade deficit. In 1986 this deficit reached \$16.2 billion, 19% higher than in 1985. The combined textile and apparel trade deficit for 1987 will probably exceed this amount; for the first 8 months of 1987 it was 20% higher than during the same period in 1986. The trade deficit for textiles for the January-August 1987 period was up 8% from the same period in 1986; the trade deficit for apparel was 22% higher for the first 8 months of 1987 than during the same period in 1986. Volume of textile and apparel imports (in square yards equivalent) was up 4% for the first 8 months of 1987 compared with the same period in 1986. Most of this increased volume was in cotton goods, up 12%; wool yardage increased by less than 1%, and manmade fiber volume was down by 2%. The following table shows the import share of the total U.S. apparel market (13):

	Year	Cotton	Wool	Manmade
1981	40.9	39.8	22.9
1982	38.6	46.8	25.9
1983	43.0	45.5	28.5
1984	50.8	54.6	38.2
1985	51.0	68.0	42.3
1986	51.3	60.0	44.1

During the first 6 months of 1987, China was responsible for 13.5% of textile and apparel imports and half of the increase over 1986 levels (2). The bilateral trade agreement between the United States and China expired in 1987, and intensive negotiations are underway. Bilateral agreements regarding textile and apparel trade have been completed with Malaysia, Indonesia, and Egypt. Other countries whose bilateral agreements expired in 1987, in addition to China, include Mexico, Romania, and Costa Rica (1). Talks were also held with the

¹This article is adapted from a paper distributed at the Annual Agricultural Outlook Conference in December 1987 in Washington, DC.

²The dollar value of women's apparel comprises a 53% share (16) of the total apparel market.

U.S.S.R. concerning their exports of cotton sheeting material at an annual rate of 10 million square yards. An agreement with Canada, to create a Free Trade Area between the two countries, would provide for unrestrained trade with no duties imposed. The American Textile Manufacturers Institute, Inc., is cooperating with the Canadian Textile Institute and U.S. Government agencies to formulate rules of origin that will prevent transshipments from third countries (2).

Legislation has been introduced in Congress to allow clothing made in Caribbean Basin Initiative (CBI) countries from fabric made in the United States to enter the

United States duty free. Intended to promote economic and political stability in the CBI countries, a duty-free and quota-free access to the American market would attract private investors, both U.S. and Asian.

Supplies, Prices, and Consumption of Fibers

The 1987 mill consumption of total fibers is estimated at 53.0 pounds per capita. This includes 15.5 pounds of cotton, 0.6 pound of wool, and 36.9 pounds of manmade fibers. Per capita use in 1986 was 50.0 pounds, including 13.5 pounds of cotton, 0.6 pound of wool, and 35.9 pounds of manmade fibers.

Table 1. *Percent change in prices of apparel commodities, December 1986 to September 1987*¹

Group and item	Percent change (annualized)
All items	5.5
Apparel commodities	7.3
Men's and boys'	3.4
Men's	5.8
Suit, sport coats, coats, and jackets	5.4
Furnishings and special clothing	1.2
Shirts	10.9
Dungarees, jeans, and trousers	5.4
Boys'	-4.4
Women's and girls'	11.6
Women's	12.8
Coats and jackets	11.6
Dresses	29.0
Separates and sportswear	11.4
Underwear, nightwear, hosiery, and accessories	-0.3
Suits	18.1
Girls'	6.2
Infants' and toddlers'	0.5
Other apparel commodities	9.6
Sewing materials, notions, and luggage	0.7
Watches and jewelry	11.6
Footwear	3.1
Men's	1.8
Boys' and girls'	3.3
Women's	4.0

¹Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W).

Source: Calculated from the CPI Detailed Report, December 1986 and September 1987, U.S. Department of Labor, Bureau of Labor Statistics.

Cotton. The 1987 U.S. cotton crop is estimated at 13.9 million bales, 43% higher than in 1986. Cotton prices have strengthened since August 1986, averaging 64 cents a pound in October 1987; world prices have risen similarly over the same period, reaching 76 cents a pound in October. Although textile imports have remained at a record level³ and prices for manmade fibers have been competitive with cotton, U.S. mills are expected to use more cotton in 1987/88 (7.8 million bales) than at any time since 1971/72. Domestic cotton consumption (mill consumption plus textile imports) may exceed 22 pounds per capita, a level last reached in the late sixties. Exports for 1987/88 are estimated at 7.2 million bales, giving the

³In 1987 textile imports may amount to over 40% of total domestic cotton consumption.

United States a 30% share of the world cotton trade, compared with 26% in 1986/87.

In 1986, as in other recent years, most U.S. cotton textile imports were shipped from countries that bought little or no U.S. raw cotton. About 70% of all cotton textile imports were shipped from countries that purchased only about 20% of total U.S. raw cotton exports. Remaining imports came from countries that purchased no U.S. cotton. Countries dominating the U.S. cotton textile import market were Hong Kong, 16%; China, 16%; Taiwan, 11%; and Korea, 8%. More than one-half of all cotton textiles imported into the United States in 1986 were in the form of apparel.

Cotton's share of the apparel and home furnishings market (excluding floor coverings) for 1986 was 46%, up from 44% in 1985 (14). Specific items with market share increases for cotton include women's

Table 2. Annual expenditures on clothing and shoes¹

Year	Per capita expenditures ²		Percent of personal consumption expenditures		Aggregate expenditures	
	Constant dollars (1982)	Current dollars	Constant dollars (1982)	Current dollars	Billions of constant dollars (1982)	Billions of current dollars
1982	536	536	6.1	6.1	124.4	124.4
1983	566	577	6.2	6.0	132.6	135.1
1984	601	620	6.3	6.0	142.2	146.7
1985	619	658	6.3	6.0	147.9	157.2
1986 ₃	655	695	6.4	6.0	158.0	167.5
1987	658	724	6.4	6.0	160.1	176.2

¹Includes yard goods, but excludes services such as cleaning and repairing clothing and shoes.

²Calculated by dividing aggregate expenditures for each year by population figures for July of each year.

³Preliminary figures--average of estimates for first 3 quarters of 1987 (i.e., seasonally adjusted quarterly totals at annual rates).

Sources: Calculated from U.S. Department of Commerce, Bureau of the Census, 1987, Population estimates and projections, Current Population Reports, Series P-25, and personal communication; and U.S. Department of Commerce, Bureau of Economic Analysis, 1987, Survey of Current Business 67(7):31 (tables 2.2 and 2.3), and personal communication.

sweaters (34% in 1986, compared with 24% in 1985) and women's socks (33% in 1986, up from 24% in 1985) (5). Fleece has joined denim as a perennial cotton favorite.

Wool. Mill consumption of apparel wool during the first 6 months of 1987 was 11% above the 1986 level. U.S. farm prices for wool averaged 27% above 1986 levels for the first 7 months of 1987. Imports of raw wool during the first 6 months of 1987 were 13% above a year earlier. Wool textile imports in 1987 are expected to be nearly 10% higher than the record level in 1985.

The domestic wool knitting industry is expected to benefit from the declining value of the dollar (which makes foreign wool more expensive) and the ability to provide a quick turnaround time to retailers (6 to 8 weeks from order to delivery). Consumer preference for natural fibers, appreciation of quality, and the draping characteristics of wool jersey are increasing the demand for wool knitted garments.

Mohair. World production of mohair is estimated at 55.5 million pounds, about 14% higher than in 1986. U.S. production will increase by 11% to maintain a 28% share of the world market. American exports of mohair are expected to be at the highest level since 1972 because this year's fiber quality is superior to South African mohair. However, world demand for mohair is down because the depressed European economies are substituting less expensive manmade fibers. Also, the brushed look in apparel has been replaced by a fashion silhouette that requires softer, finer yarns with excellent draping capabilities.

Manmade fibers. Shipments of manmade fibers by U.S. producers during the first 8 months of 1987 were 7% above shipments a year earlier (14). Rayon is supplanting nylon tricot as an alternative to cotton for intimate apparel.

Developments in American Textile, Apparel, and Footwear Manufacturing

The decline in the value of the dollar has not improved the American trade position because most textile, apparel, and shoes are imported from Asian nations with currencies pegged to the dollar. In an effort to compete with imports, American manufacturers have invested heavily in new technologies to make their plants more efficient and improve product quality. In addition, the domestic industry has found it important to emphasize marketing and customer services. The Congressional Office of Technology Assessment (12) has determined that public policy action will be needed in the next few years to maintain a viable U.S. textile and apparel industry. Goals of such Federal action could be (1) to protect domestic industries against unfair trading practices by foreign firms, (2) to act to stem the tide of imports while the U.S. industry works to rebuild itself, (3) to foster an economic climate conducive to innovation, and (4) to help firms retrain workers as production techniques change.

The U.S. shoe industry is fighting to retain a share of the domestic market. Since 1968 shoe production has declined by 64%, and over 600 shoe factories have closed. In 1986 over 80% of the shoes purchased by American consumers were imported. Labor costs can be contained somewhat and deliveries can be speeded up through computerized production techniques. The shoe industry is using computer-aided design (CAD) systems and computerized stitching machines. Designers create and modify three-dimensional shoe styles on video display terminals and then the design is transferred by computer to a laser-powered machine that automatically cuts patterns to desired shoe sizes. Future applications in computer-aided manufacturing may include automatic leather-cutting, the use of robots to attach soles and fit insoles, and microprocessor-controlled lasting. An operator will be needed, however, to control these machines. Another method that speeds up the manufacturing process and improves

quality control is "modular manufacturing," whereby the old assembly line procedure is replaced by a quality circle or module where a shoe is passed from one worker to the next in a continuous flow. Workers are trained in more than one operation and authorized to make decisions in the absence of their supervisor.

Developments in Fibers and Fabrics

A wide variety of style and color must be offered by retailers to satisfy consumer demand. Garment dyeing is being promoted by Cotton, Inc., as a way to ensure quick response to retailers' needs. "Quick Response" is becoming an industry-wide slogan as a means by which domestic manufacturers can claim an advantage over foreign sources. Garment dyeing permits tighter inventory management (fewer closeouts) and closer color coordination among garment components. Also, the fabric wasted in cutting is less expensive because it has not been dyed or finished (7).

Cotton, Inc., is participating in research initiated by the International Institute for Cotton that seeks to develop a method for predicting the shrinkage and dimensional properties of finished, knitted cotton fabrics (5). A new blend of polyester and cotton with dual denier fiber construction has 70% more open structure in the yarn. Called Light Spirit Blend, the open structure permits air to flow through more easily, enhancing breathability. A second comfort-producing attribute of this yarn is the ability to quickly absorb moisture, draw it away from the skin by means of a patented process called Hydromax, and move it to the fabric surface where it evaporates. Fabrics qualifying for this certification mark will be available in topweight and bottomweight goods (4).

A new certification program for Thermax thermal-wear, two-layer fabrics permits manufacturers to knit Thermax in combination with other fibers as long as the layer worn next to the skin is 100% Thermax. This allows the Thermax fibers to trap heat radiated from the body and to wick moisture away from the skin (7).

Softec Dacron, a patented family of filament polyester fibers, has yarn properties that improve on traditional Dacron. These include softness, a luxurious hand, excellent draping qualities, and the ability to dye and nap more easily (6).

HighTrek is a yarn blended of Orlon, Hollofil, and wool. Sweaters made of HighTrek offer the thermal protection of wool at less cost (8).

A yarn of 75% Orlon acrylic and 25% nylon, with the certification mark "Duralon," has been developed for use in socks. Socks made from Duralon are expected to wear twice as long as those made of Acrilan II, 50% wool and 50% acrylic, or 100% cotton, in addition to being very soft (9).

Comfort Fiber polyester, available for almost 6 years in knitted goods, will be available in spring '88 woven garments. Re-engineered and chemically modified, Comfort Fiber is reputed to be more breathable and durable than cotton, washable with less shrinkage than cotton, but priced similarly (8).

USDA Research on Fibers and Fabrics

Chemists at USDA's Southern Regional Research Center (SRRC) in New Orleans are continuing their study of temperature-adaptable fabrics. These fabrics are treated with polyethylene glycols (PEG's) that can be chemically attached to most natural and synthetic fibers. Treated fabrics store and release heat at various temperatures by the reversible melting and crystallization of PEG's. The treatment, named Polytherm, is being tested to discover how much chemical is needed to produce a noticeable retention or release of heat, and how long the thermal effect lasts in different environments. Means to increase durability are also being studied. Polytherm has many potential applications in apparel, household furnishings, and building insulation products.

Other work at the SRRC has made it possible for cotton and other cellulosic fibers to be treated to accept almost all classes of dyes, under a wider range of pH conditions than was formerly possible. Untreated cellulosic fibers do not accept disperse dyes (used for synthetic fibers) or acid dyes (used for wool and some synthetic

fibers). Treated fibers can be blended with wool and polyester, and the fabric dyed with one dye to produce a uniform shade, or with two different types of dye to produce a bicolored fabric (each fiber accepting a different dye). In addition to reducing the number of dye steps, this new treatment makes the fabric more colorfast than one made with untreated yarns.

Studies to improve the quality of American wool are being undertaken by ARS scientists at the Eastern Research Center in Philadelphia. Because most U.S. raw wool is a by-product (sheep are raised primarily for meat), it receives less care and frequently contains urine stains, vegetation matter, and black hairs that must be removed by the textile mill. Mills are willing to pay a higher price for Australian wool without these problems. In 1985, 80 million pounds of clean wool were imported, up from 27 million pounds in 1974. Domestic production of clean wool dropped to 46 million pounds in 1985, from 88 million pounds in 1970. Current research is directed toward finding new methods for (1) bleaching pigmented wool without hurting its quality, which will remove the yellow stains of urine; (2) extracting bits of debris without weakening the fiber or affecting its hand; and (3) removing grease, particularly by using compressed carbon dioxide to separate the grease into more useful components.

Apparel Consumption and the Outlook for Retailing

In 1986, consumers, in the aggregate, purchased 8.4% more items of apparel and spent 7.5% more for those items than in 1985. Also, on average, each individual consumer bought more garments in 1986 than in 1985. Women's apparel grew at the fastest rate (11.1% in units, 9.8% in dollars). Active wear (warmup suits, sweat shirts, sweat pants, and sweat shorts) increased by almost 45%, both units and dollars. Total footwear purchases reached 1.04 billion pairs in 1986 (up 6% from 1985), selling for \$18.9 billion dollars (up 5% from 1985). Women's shoes accounted for one-half of shoe sales in both unit and dollar volume. Almost one-third of all men's shoes and over two-fifths of all footwear purchased for children were athletic (16).

Department stores and department chain stores sold 36% of apparel units and collected 45% of all the dollars spent on clothing in 1986. Discounters obtained a unit market share of 31% but only 17% of the dollar value. Specialty stores sold only 12% of all garments but collected a 23% share of the dollars spent on apparel (16).

About 70% of all adults shop at a regional mall at least once a week. Men make up one-third of the adult mall shoppers. Adults average 6 hours shopping per week; teenage girls spend 4 hours and teenage boys, 2 hours. One survey of 34,300 mall shoppers determined that only one-fourth had come in search of a specific item; the others viewed shopping as a kind of pastime or hobby (11). The market for regional malls in the United States is becoming saturated. New malls need to feature some unique approach. One of the largest malls, planned for Minneapolis, will offer an indoor amusement park with a roller coaster, water slides, a hotel, and 800 stores and 100 restaurants. Other malls have no department store anchor but many specialty and food shops. Also, developers are returning to the cities. A mall is planned on the site of a former Gimbels in Manhattan. This mall will feature 100 stores on multiple levels, accessible by escalators, with gourmet foods on the top retail level and offices above (10).

Retailers are finding it more profitable to specialize. Department stores will no longer carry the variety of merchandise lines once believed necessary. On October 28, 1987, J.C. Penney Co., Inc., announced a decision to discontinue selling home electronics, hard sporting goods, and photographic equipment in all retail stores effective spring 1988, and to make more space available for women's clothing. Major appliances, sewing goods, and toys are a few of the other categories that have disappeared in many department stores. Remaining lines are increasingly segmented, and the successful department stores will be those that feature ambience and special boutiques throughout.

J.C. Penney Co., Inc., will offer a home shopping service called Teleaction. Viewers tune in the appropriate cable channel, dial

a local phone number, enter a personal identification number, select the category of products (by using telephone push buttons), and then place the order. In addition to goods from Penney's, items will be sold by Marshall Field & Co., Spiegel Inc., Abercrombie and Fitch, and American Airlines. Sears, Roebuck & Co. is another major retailer with plans to offer products for sale via cable television. QVC network has exclusive rights at this time to present selected Sears products (including many not offered in Sears stores or catalogs) to 26 major cable systems.

Video kiosks are expected to handle sales worth \$350 million by 1990 (3). To place an order, the customer slides a credit card into a slot on the machine, presses a series of keys to call up pictures of the merchandise and another series to make a selection, enters the address to which the order should be delivered, and picks up a receipt. In several hundred Florsheim stores, a video kiosk insures that none of the 300 styles of shoes is ever out of stock in any size or color (15). If the store doesn't have the exact style, color, and size needed by the customer, interactive video makes it possible to have the shoes delivered to the customer's home within a week. Sears, Roebuck & Co. is another retailer selling by means of interactive video. Window treatments (11,000 types and sizes of curtains, blinds, and shutters) too numerous for any store to stock can be ordered in this manner in selected test markets (15).

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Consumer Reactions to Price Savings on Food¹

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Obtaining low prices for groceries continues to be mentioned by over 90% of all consumers as the major reason for choosing their supermarket (10). There is great potential in the market today for consumers to save on their food bills. Savings can be obtained on groceries through the use of coupons distributed by retail outlets and manufacturers, by taking advantage of sales, and by comparison shopping. Expenditures on food away from home may also be affected by savings on groceries. This study examines how expenditures on grocery items and food away from home are affected by perceptions of savings available on grocery items in dual-earner households.

Dual-earner households currently represent a large and expanding segment of the U.S. population. In the last 20 years this segment has grown from 37% to 45% of the population. In addition, dual earners have a high level of disposable income compared with other households. In constant 1986 dollars, disposable income for this group has increased from \$23,099 in 1966 to \$36,717 in 1986 (13). When two adults are employed in the labor market, increased demands are likely to be placed on the time they have available for household activities, including grocery shopping. Moreover, increases in income permit a wider selection of goods and services from which to choose and purchase.

Given the increased time demands and relatively high incomes of dual-earner households, this group would not be expected to react strongly to price savings on food items. Any one food item in a grocery basket represents a small percentage of the total

share of income spent on food.² Despite expectations, it appears that dual earners do react to savings available on food. Kaitz (7) found that 52% of employed women checked the food ads and 22% shopped at more than one store. These figures were obtained during a period of high inflation for food items. Between 1977 and 1979, food prices increased an average of 10% per year. In dual-earner households sampled by the author in 1986, 95% of shoppers reported reading food ads, 92% clipped coupons, and 39% shopped at more than one store. These techniques were used to save money on grocery bills even though food prices had increased an average of only 3% per year since 1984. Saving on the family food bill appears to be becoming more popular despite low inflation for food items.

CONCEPTUAL FRAMEWORK AND DATA

One way to examine the effect of price changes on consumer behavior is to observe the reaction of consumer expenditures to changes in savings. In this study consumer price information search and expenditures on food goods are modeled in a framework that combines household production theory and the economics of information (4, 9). In household production theory, time and goods are combined to produce commodities that yield satisfaction. For example, meals are produced using time and food inputs. The completed meal produces satisfaction, not the food purchased at the supermarket. Price information is included as a home-produced good, using time inputs and purchased inputs, such as newspapers and transportation costs necessary to locate lower prices.

In cross-section analysis, prices are usually assumed to be constant. However, because price dispersion exists during a single time period, cross-section data can be used for estimation. The data used in this study were collected during summer 1986

¹This article is condensed from a paper presented at the Annual Agricultural Outlook Conference in December 1987 in Washington, DC.

²All food purchases represent about 14.7% of disposable income for the general population (11).

from a sample drawn from Onondaga County, NY. A telephone survey, followed up by a mail survey, yielded 95 completed questionnaires. All the households consisted of two adult part- or full-time workers, with or without children. A comparison of the sample with the general population of dual earners revealed no significant differences in mean incomes or number of children, although the

sample over-represented persons with professional occupations and college educations (12). This is not unusual in survey research, especially when time and money constraints prohibit recontacting nonrespondents more than three times. Considering only the dual-earner population, certain inferences can be made regarding this particular market segment. The table below presents summary statistics.

Summary statistics of the Onondaga County, NY, dual-earner sample

Variable	Mean	Standard deviation
Annual family income	\$40,359.40	\$14,175.52
Weekly nonwage income (includes salary of nonshopper)....	460.43	225.81
Perceived dollar savings on weekly dairy groceries63	.42
Actual dollar savings on weekly dairy groceries66	.98
Perceived dollar savings on weekly nondairy convenience groceries	4.11	2.76
Actual dollar savings on weekly nondairy convenience groceries	3.10	2.39
Weekly expenditures on dairy fast-food away from home (purchased at restaurants, cafeterias, etc., that do not offer table service	4.42	6.02
Weekly expenditures on dairy full-service food away from home (table service is offered)	4.87	9.09
Weekly expenditures on nondairy food away from home....	11.55	12.80
Weekly expenditures on nondairy convenience foods.....	24.58	12.18
Weekly expenditures on dairy groceries.....	5.88	4.33
Price of search time.....	5.79	4.76
Percentage of shoppers who have completed college ¹	44	
Percentage of shoppers holding a professional or administrative position ¹	52	
Weekly number of hours spent by major shopper searching for lower prices.....	2.33	4.19
Age of major shopper (years).....	37.74	9.47
Number of children 12 years and over living in household..	.64	.93
Number of children under the age of 12 years living in household.....	.73	.92

¹For variables measured as dummy variables, the proportion of the sample satisfying the specified condition is presented instead of the mean value.

EMPIRICAL FRAMEWORK AND RESULTS

Equations were estimated for the share of full food income³ spent on dairy groceries, nondairy convenience groceries,⁴ dairy fast food away from home, dairy full-service food away from home, nondairy food away from home, and price information search. Expenditure shares were estimated as a function of wage rate, perceived savings, nonwage income, number of young and older children, whether a person ate food away from home for social or business reasons, whether the major shopper in a household completed college, a measure of the quality of convenience food items, and a measure of the enjoyment a shopper obtains from search time.

The effects on share of full income spent for food were determined from savings on dairy and nondairy groceries and changes in the price of search time (since consumers "produce" savings via price information search).⁵ Because some respondents reported zero expenditures on dairy groceries and food away from home, these equations were estimated using the Tobit maximum likelihood technique, which corrects for bias created when using censored samples (8). Ordinary least squares was used for estimation of nondairy convenience groceries and search time equations because all respondents reported positive expenditures. Coefficients on variables in expenditure share equations

³ Full food income consists of the value of all time and purchased inputs used in food price information search and meal preparation.

⁴ Nondairy convenience foods consist of frozen and canned fruits and vegetables; dry mixes; prepared soups and sauces; cold and instant cereals; bakery products; meats already boned, skinned, canned, or cooked; and frozen dinners and entrees.

⁵ In the model estimated, the price of search time is not equal to the market wage but equals the wage rate minus marginal savings available in the market. The estimated coefficients allow the effect of the price of search time to be examined separately from the effect of a change in the price of other uses of time, measured by the wage rate.

were transformed into marginal changes in expenditures and then used to calculate savings and price of search time elasticities.

Six significant results were found for consumers who had positive expenditures on dairy groceries and nondairy convenience groceries during the survey week:

1. A 10% increase in perception of savings on dairy foods leads to a **2.8% decrease** in expenditures on dairy foods. It appears that consumers actually save money on their dairy food expenditures when perceptions of savings for dairy foods increase. They do not overcompensate for increases in perceived savings by increasing the quantities purchased by more than the savings available.

2. A 10% increase in perceptions of savings on nondairy convenience foods leads to a **2.8% increase** in expenditures for dairy foods. Consumers apparently utilize "income" generated through the production of savings on nondairy convenience foods to increase expenditures on dairy foods. This is good news for the dairy industry, which is trying to persuade consumers to increase consumption of dairy foods. It is potentially good news for consumers who are interested in the nutrition provided by dairy foods as compared with other convenience foods.

3. A 10% increase in perceptions of savings on nondairy convenience foods leads to a **1.8% decrease** in expenditures for dairy fast food away from home. Consumers may be substituting food at home for dairy fast food away from home as the price of nondairy convenience food becomes relatively cheaper because of available savings. Thus, the total time and monetary cost of producing meals at home using convenience items may become a more desirable alternative than eating fast food away from home to save time.

4. A 10% increase in the price of search time leads to a **0.9% increase** expenditures for dairy foods.

5. A 10% increase in the price of search time leads to a **2.4% increase** in expenditures for nondairy convenience foods.

6. A 10% increase in the price of search time leads to a **1.7% increase** in expenditures for dairy fast food away from home.

The last three results indicate that as the price of search time increases, so do certain expenditures. As the price of search time increases, the demand for search time should decrease. Consumers who spend less time in price information search may pay higher prices. In addition, as the price of search time increases, the price of other time uses may increase as well. Consumers may increase the use of dairy foods, non-dairy convenience foods, and fast food away from home to save time in meal preparation.

OUTLOOK

The general outlook for consumers wishing to save money on their food bills is optimistic. As long as consumers continue to engage in price information search, we are likely to see an inelastic decrease in food expenditures as a response to increases in savings. In addition, if one can infer that increases in price information search have taken place since 1978 (by comparing Kaitz' results (7) with those of the present study), there is evidence that price information search may increase even if all other factors remain constant. Reactions of consumers to price savings, however, will depend on general economic conditions, the actions of food manufacturers and retailers, and consumer sentiment.

The October 1987 Survey of Consumer Sentiment indicated that consumers are less optimistic about the economy (6). Surveys conducted by Advertising Age (1, 2) during the weeks of October 19 and October 27, 1987, indicated that about 25% of consumers expect to decrease spending on groceries and close to 33% expect to decrease spending on food away from home in the near future. However, as of November 3, 1987, these figures had fallen to 12% and 16%, respectively (3). It is likely, given the above indicators, that price information search will rise as consumers attempt to moderate food expenditures.

Consumers are likely to be sensitive to future price increases. Given low inflation levels for groceries during the eighties, any price increases may be seen as "irregular" and immediately noticed. If food prices do rise, consumers will probably engage in both cutting down on food purchases

and increasing savings on their food bills through price information search. Convenience items, for which consumers pay a premium to achieve time savings, may be among the first items curtailed. In response, food manufacturers are likely to increase savings available to consumers on these items by increasing available coupons or offering incentives to supermarkets to place these types of items on "special," making price information search more profitable for consumers. In this scenario, searching for lower prices may become more important for consumers wanting to moderate food expenditures.

Consumers who wish to obtain savings on a market basket should continue to engage in price information search. This study focused exclusively on dual-earner households, where shoppers generally have higher prices of time than shoppers in households with single earners.⁶ The price of search time for unemployed shoppers will remain lower than that of employed shoppers, provided they perceive similar savings available in the food market. If price dispersion persists in the future, all groups of consumers can continue to benefit from savings available on groceries through price information search.

⁶ Bryant and Zick (5) found that nonemployed consumers had consistently lower wage rates than employed consumers when using either the reservation wage or market alternative approaches to pricing home work time.

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Regional Per Capita Personal Income¹

Regional differences in per capita personal income have widened since 1979, reversing a 50-year trend of narrowing differences, according to a report by the Bureau of Economic Analysis (BEA), U.S. Department of Commerce. Per capita personal income for a region can change relative to the U.S. average if its total personal income, its

¹Per capita personal income of a region is the total personal income earned by its residents divided by the number in the population. Total personal income is the sum of before-tax income received by persons from all sources, less personal contributions for social insurance.

population, or both grow at a faster or slower rate than the U.S. average. For example, between 1979 and 1986 the below-average gain in per capita personal income in the **Far West** region (6.8%, compared with 7.1% for the Nation) reflected rapid growth in population (2.0%, compared with 1.0% for the U.S.). This population growth in the Far West more than offset rapid growth in personal income (8.9%, compared with 8.2% for the country). Regional per capita income gains between 1979 and 1986, and changes in population size and total personal income by region are provided in the BEA report. Also, industries that had a strong affect on changes in total personal incomes are enumerated.

Per capita income gains in the **Mideast** and in **New England** were higher than national average gains between 1979 and 1986 (table). Total personal income grew rapidly in these regions, boosted by large increases in earnings in service industries such as banking, brokerage, legal, business, and health. In New England, large earnings increases were also realized in the electronic, computer, and defense industries. Population growth was deterred by relatively high housing costs, which discouraged workers from migrating to these regions despite increased job opportunities.

Slow growth in total personal income in the **Great Lakes** region and an unchanging population size accounted for a below-average gain in per capita income. Older manufacturing industries, such as iron and steel, yielded only small increases in earnings. Additionally, earnings increases in construction and trade were small, as zero-population growth adversely affected the demand for housing and consumer goods.

Per capita personal incomes for the **Rocky Mountain** and **Plains** regions also showed below-average gains. Growth in total personal income was dampened by small earnings increases in industries affected by farming and by oil prices and production. Rapid population growth in the Rocky Mountain region also contributed to that region's below-average per capita personal income growth.

In the **Southwest** as well, there was a below-average gain in per capita income. An above-average gain in total personal income

from 1979 to 1982 resulted from the boom conditions associated with rising oil prices. Beginning in 1982, however, slow growth in total personal income, in conjunction with continued rapid population growth, more than offset this gain.

In the Southeast region there was an above-average gain in per capita personal

income. Above-average per capita gains in Tennessee (see table) and the Atlantic Coast States offset below-average gains in the other States. Atlantic Coast States sustained a rapid growth in population, but earnings increases in banking, business, health, and defense-related industries compensated for population growth. In the

Per capita personal income, by State and region, 1986

Region	Amount (dollars)	Percent of national average	Average annual percent change, 1979-86
United States	14,641	100	7.1
New England:			
Connecticut	19,600	134	9.0
Massachusetts	17,722	121	9.4
New Hampshire	15,911	109	9.0
Rhode Island	14,579	100	8.1
Vermont	13,348	91	8.0
Maine	12,790	87	8.2
Mideast:			
New Jersey	18,626	127	8.9
District of Columbia ..	19,397	132	8.0
New York	17,111	117	8.6
Maryland	16,864	115	8.3
Delaware	15,010	103	7.3
Pennsylvania	14,249	97	6.8
Far West:			
California	16,904	115	7.0
Nevada	15,437	105	5.7
Washington	15,009	103	6.2
Oregon	13,328	91	5.5
Great Lakes:			
Illinois	15,586	106	6.4
Michigan	14,775	101	6.4
Ohio	13,933	95	6.5
Wisconsin	13,909	95	6.3
Indiana	13,136	90	6.1
Plains:			
Minnesota	14,994	102	7.2
Kansas	14,650	100	6.7
Missouri	13,789	94	6.9
Nebraska	13,742	94	6.5
Iowa	13,348	91	5.6
North Dakota	12,472	85	5.8
South Dakota	11,814	81	5.6
Southwest:			
Texas	13,478	92	6.2
Arizona	13,474	92	7.1
Oklahoma	12,283	84	5.6
New Mexico	11,422	78	6.3

States with below-average gains in per capita income, slow growth in total personal income was the major restraining factor. (Population growth also was slow.) Personal income growth was adversely affected by small earnings increases in farming, coal mining, and in related manufacturing industries, including food processing and primary metals.

The table delineates per capita income by region and State, in dollar amounts, as well as in other measures.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, 1987, Regional Differences in Per Capita Income Widen in the 1980's, News, BEA 87-39.

Per capita personal income, by State and region, 1986--continued

Region	Amount (dollars)	Percent of national average	Average annual percent change, 1979-86
Rocky Mountain:			
Colorado	15,234	104	7.1
Wyoming.....	12,781	87	3.3
Montana.....	11,803	81	5.4
Idaho	11,223	77	5.3
Utah	10,981	75	5.8
Southeast:			
Virginia	15,408	105	8.5
Florida	14,646	100	7.7
Georgia	13,446	92	8.5
North Carolina	12,438	85	7.9
Tennessee.....	12,002	82	7.2
Alabama	11,336	77	7.0
South Carolina	11,299	77	7.3
Kentucky.....	11,238	77	6.2
Louisiana.....	11,193	76	5.6
Arkansas.....	11,073	76	6.9
West Virginia.....	10,576	72	5.6
Mississippi	9,716	66	6.0
Louisiana.....	11,193	76	5.6
Arkansas.....	11,073	76	6.9
West Virginia.....	10,576	72	5.6
Mississippi	9,716	66	6.0
Alaska	17,796	122	5.2
Hawaii.....	14,886	102	6.6
BEA Regions:			
New England	17,166	117	9.0
Mideast	16,565	113	8.1
Far West	16,348	112	6.8
Great Lakes	14,467	99	6.4
Plains	13,992	96	6.6
Southwest.....	13,195	90	6.3
Rocky Mountain	13,146	90	6.1
Southeast	12,694	87	7.4

Source: U.S. Department of Commerce, Bureau of Economic Analysis, 1987, Regional Differences in Per Capita Income Widen in the 1980's, News, BEA 87-39.

Nationwide Food Consumption Survey 1987

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A nationwide study of the food consumption and dietary levels of households and of food and nutrient intake of individuals began in April 1987. The Nationwide Food Consumption Survey (NFCS) 1987 is the seventh in a series of food consumption surveys conducted by USDA's Human Nutrition Information Service (HNIS) and its predecessor agencies. Data from earlier surveys (1935-36, 1942, 1948, 1955, 1965-66, and 1977-78) have provided major sources of data in evaluating and developing national food and nutrition policies.

The NFCS 1987 included a sample of about 6,000 households of all incomes and a sample of 3,600 households of low incomes. The Survey included the following two parts:

1. **Household phase.** Respondents were asked to provide information on household characteristics, the food used by the household for a 7-day period, and the cost of that food. In this phase of the Survey, food quantities and money values were determined for items used from the home food supply. Usage was reported in the form in which foods entered the kitchen and by source (purchased, home produced, or received as gift or pay). Consumption was measured in an economic context--that is, all foods that were used or that "disappeared" from the household food supply during the 7-day period.

2. **Individual intake phase.** Household members were asked to provide 3 successive days of information of their food intake. This information was collected using a 1-day dietary recall followed by a 2-day food record. Respondents were asked to describe foods and beverages and to identify them by source, such as home food supplies, school lunch, or restaurant meal. In this phase, the quantities were recorded for amounts of food eaten at home and away from home.

The NFCS 1987 is one of several Federal surveys that provide national statistics on food consumption. Also, NFCS 1987 is a major component of the National Nutrition Monitoring System (NNMS), a set of related Federal activities instituted to provide regular information on the nutritional status of the population.¹ NNMS activities are centered primarily in the USDA and the U.S. Department of Health and Human Services.

Why New Information Is Needed

Every major USDA survey has shown changes in the patterns of food consumption. Between the 1935-36 and the 1948 studies, great strides were made in the distribution and storage of food products, most notably in home refrigeration. Such changes affected the way people purchased and used food. Between the 1955 and 1965-66 studies, the availability and consumer acceptance of many new food products that offered convenience changed the cooking patterns in many American households. Mixes for bakery products, such as cakes and muffins, and readymade bakery products are examples. Because of the decline in "baking from scratch," substantial decreases were noted in the household consumption of flour, sugar, and other basic baking ingredients.

The period between 1965-66 and 1977-78 saw the proliferation of new products. Technological changes (such as freeze-dried coffee and a variety of commercially frozen foods) reflected breakthroughs in food processing and packaging. Changes in lifestyles (such as increases in the proportion of women employed outside the home) appear to have decreased the time spent in meal preparation and increased the demand for convenience foods and fast-food-restaurant meals.

The NFCS 1987 may also show changes in the pattern of food consumption reflecting economic changes in incomes, relative food prices, and demographic effects. There have been changes in household composition, particularly a trend toward smaller families,

¹Peterkin, Betty B., and Robert L. Rizek, 1984, National Nutrition Monitoring System, Family Economics Review 1984(2):15-19.

and shifts in the age distribution. Other factors may also contribute to changing patterns of food consumption--an increased frequency of eating away from home, a greater emphasis on ethnic foods, and popular use of aseptically packaged milk and beverages. The period since the last survey has been a time of increased concern about the relationship between diet and health, resulting in a greater variety of low-sodium and low-fat products becoming available in the market. Also, revisions in food program policies may have influenced food intakes of participants in programs such as the Food Stamp Program; School Lunch Program; and Women, Infants, and Children Program.

The Background

National Analysts (Division of Booz, Allen and Hamilton, Inc.) under contract with HNIS, collected the data, provided preliminary data processing services, and delivered the final data tapes to HNIS. The final data will be tabulated for publication in a series of reports and statistical handbooks.

The contract was carried out under detailed specifications developed by USDA. Technical information used in data computations and codings was supplied by the Department. USDA food and nutrition specialists participated actively in developing operating manuals, training programs, and computer software, as well as in monitoring the survey.

A number of organizations contributed to the development of the NFCS 1987 questionnaire. These include USDA agencies; U.S. Department of Health and Human Services; other Federal agencies; regional, State, and local groups such as Public Health Service nutrition directors; food industry and trade associations; universities; and nutrition and social action organizations.

Operating procedures used in the Survey were, in general, the same as those used in the NFCS 1977-78. The Survey was designed to provide a multistage stratified area probability sample representative of the 48 conterminous States. The sampling frame was organized using estimates of the U.S. population in 1980 updated to 1987. The stratification plan took into account geographic location and degree of urbanization.

Each successive sampling stage selected increasingly smaller, more specific locations.

Households were drawn from the 9 geographic divisions and 3 urbanization classes in the 48 conterminous States as defined by the U.S. Bureau of the Census. The Survey consisted of two separate samples:

1. An area probability sample that was self-weighting and sufficient to produce without substitution 6,000 completed household questionnaires in a 1-year period beginning in April 1987.

2. An area probability sample of low-income households adequate to provide information from at least 3,600 sample households with incomes not to exceed 130% of the poverty income levels. A special screening procedure was implemented to assure that a proper and adequate number of households were sampled in a 1-year period beginning in April 1987.

The NFCS 1987, like earlier USDA surveys, was designed to make effective use of qualified interviewers who may or may not have professional training in foods and nutrition. Emphasis was given to interviewer selection, training, and follow up. Each interviewer was trained in an intensive 5-day session.

The Survey

The NFCS 1987 involved three visits with participants: (1) An initial visit to identify respondents, describe the survey, and provide material on keeping notes on household food used during the survey period; (2) a personal interview 7 days later to conduct the household phase of the survey, to obtain a 1-day dietary recall from individual members of the household, and to leave a 2-day dietary record for individual household members to complete; and (3) a final contact 2 days later to help complete the survey, if needed, and collect the 2-day dietary record.

At the initial visit, an introductory letter was given to the household. Interviewers made an appointment, at least 7 days later, for an interview with the household member(s) responsible for food planning and preparation. The respondent was requested to keep notes, grocery store receipts, package labels, and other helpful reminders of foods used during the 7 days before the interview. Special receipt holders were provided.

During the second visit, the interviewer collected information about the household--such as the age and sex of the members, education, employment, and income--and then administered the 7-day recall of food consumption. Upon completion, the interviewer began the 3-day food intake record for individuals, which included a 1-day recall (of the previous day) and a 2-day record (of that day and the next). The interviewer obtained 1-day recalls of food intake from all eligible household members present--or for young children, from the homemaker. Concurrently, the interviewer trained household members in completing the intake records, which were left with the household for completion. The interviewer returned 2 or 3 days later to review the food-intake schedules for completeness and legibility and to assist in their completion when needed.

Some methodological changes were introduced in the NFCS 1987 to improve and expand the data collection and processing. These include the following:

• **Interviewing.** In the household phase, the interview was conducted with the use of a laptop computer. It was expected that this procedure would reduce data processing time and make the survey results available on a more timely basis than in previous surveys. In the individual phase, intake records were collected from all members, whereas in 1977-78, data from all members were collected in spring and from selected members in the other seasons.

• **Questionnaire.** More comprehensive questions were asked in both the household and individual phases of the NFCS 1987 than in the 1977-78 Survey. Race and ethnicity were requested for each household member rather than for just the respondent; education, employment status, and occupation were asked for all household members 15 years and older rather than for only the household heads. Additional questions affecting food intakes were asked, such as sources of nutritional information, smoking habits, and levels of physical activity. In the individual intake phase, the interviewers probed more for information on the amount and type of fat, on salt, and on "forgotten" items than they did in 1977-78.

• **Food coding.** In the individual intake phase, the food coding system that was introduced in the 1985 Continuing Survey of Food Intakes by Individuals (CSFII) was used.² The system can be updated on a continuing basis to include new products in the market. Most of the 1977-78 food codes can be adjusted to fit into the new system.

• **Nutrient data.** The nutrient data base used in 1987 has been updated and expanded since 1977. The data base in 1977-78 included food energy and 14 nutrients: protein, total fat, carbohydrate, vitamin A (in international units), vitamin C, thiamin, riboflavin, niacin, vitamin B₆, vitamin B₁₂, calcium, phosphorus, magnesium, and iron. Thirteen additional nutrients and dietary components were included in 1987--saturated fat, monounsaturated fat, polyunsaturated fat, cholesterol, dietary fiber, vitamin A (in retinol equivalents), carotenes, vitamin E, folacin, zinc, copper, sodium, and potassium. Other changes in the nutrient data base resulted from improved data (especially for iron, magnesium, vitamin B₆, and vitamin B₁₂), changed enrichment standards for iron; higher fortification of some foods with calcium, phosphorus, and other nutrients; and changes in foods such as the higher vitamin A content of new varieties of carrots, and the lower fat of some meats and meat products.

Uses of the Data

The NFCS 1987 meets a wide and expanding range of needs for national data--on consumers, foods, and nutritional content of diets--that are not available from other sources. The Survey aims to link consumers with their food in terms of (1) nutritional content and dietary adequacy and (2) factors associated with acquisition, preparation, and use of these foods. The following is a summary of the uses of data from the Survey.

²The individual intake phase of NFCS 1987 is similar to the USDA's CSFII. This smaller, special purpose survey conducted in 1985 and 1986 obtained information only on adults 19 to 50 years of age and children 1 to 5 years old. The NFCS 1987 includes individuals of all ages.

USES OF DATA FROM NATIONWIDE FOOD CONSUMPTION SURVEYS

Dietary Intake

- Provide detailed benchmark data on food and nutrient intake of population.
- Monitor the nutritional quality of diets.
- Determine the size and nature of populations at risk.
- Identify intervention (food assistance), fortification, or education most appropriate for populations at risk.
- Identify socioeconomic factors associated with diets.

Economics of Food Consumption

- Assess demand for agricultural products, marketing facilities, and services.
- Determine the effects of socioeconomic factors on the demand and expenditure for food.
- Determine the importance of home food production.
- Determine the demand for food away from home and its effects on adequacy of diets.

Food Programs and Guidance

- Determine factors affecting participation in food programs and the effect of participation on food expenditures and quality of diet.
- Determine change in participation and the effects that would result from modifications in food programs.
- Determine the effect of food programs on demand for food.
- Identify populations at risk for possible intervention programs.
- Identify changes in food and nutrient consumption that would reduce risk.
- Develop food guides and plans that reflect food consumption practices and meet nutritional and cost criteria (Thrifty Food Plan used as basis for allotment for the Food Stamp Program).
- Determine levels for food distribution programs.

Food Safety

- Determine intake of incidental contaminants, food additives, and naturally occurring toxic substances.
- Identify extreme and unusual patterns of intakes of foods or food ingredients including additives.
- Determine number of food items in which a food additive may be permitted and in what amounts.
- Determine the need to modify regulation in response to changes in consumption.
- Identify size and nature of population at risk from use of particular foods and food products.
- Identify patterns of use of foods and food components in the diets of a population.

Historical Trends

- Correlate food consumption and dietary status with incidence of disease over time.
- Follow food consumption through the life cycle.
- Predict changes in food consumption and dietary status as they may be influenced by economic, technological, and other developments.

Husbands in the Labor Market

Historically, married men have experienced higher earnings and lower unemployment than other major groups in the labor force. Although husbands' labor force participation rate is higher than that for never-married or formerly married men (see table below), it has been falling for several decades. Data from recent Current Population Surveys (CPS)¹ were used to examine this long-term downward trend and other labor force characteristics associated with married men.

Contraction in labor force participation rate: A trend

The labor force participation rate of husbands declined from 91% in 1955 to 79% in the 1985-87 period. The participation rate fell most rapidly between 1970 and 1975. Recent figures indicate that the rate

¹ The CPS is the monthly household survey (presently including 59,500 households) conducted for the Bureau of Labor Statistics by the Bureau of the Census. Information obtained from the survey relates to the employment status of the noninstitutional population 16 years old and over.

has plateaued, at least temporarily. The long-term decline in the labor force participation rate of husbands, although fairly pervasive by age, was led by older men. The rate for husbands 65 years and older fell roughly 27 percentage points over the 1955-85 period. The decline for 55- to 64-year-olds was nearly as dramatic (18 points).

Increases in the level and availability of nonemployment income (such as Social Security retirement benefits, private pensions and disability benefits) over the past several decades have allowed men to retire at younger ages. In fact, the substantial real increases in Social Security payments that occurred during the early to mid-seventies are frequently cited as one reason for the accelerated rate of decline in labor force activity among older men during the same period.

Private pension plans, another major source of retirement income, covered 49% of all private sector workers in 1979 compared with 24% in 1950. In addition, these plans have become increasingly liberal in their provisions for early retirement. Evidence indicates that more workers are taking advantage of these options to leave the labor force at younger ages.

Employment status of men, by marital status and age, March 1987

Employment and marital status	Total, 16 years and over	16-24 years	25-34 years	35-44 years	45-54 years	55-64 years	65 years and over
Labor force participation rate:							
Husbands	78.5	95.3	97.1	96.2	93.7	70.6	17.5
Never married	71.7	65.2	88.0	83.7	71.7	56.0	16.3
Other marital status	67.9	87.6	92.9	91.1	86.1	58.2	11.1
Unemployment rate:							
Husbands	4.5	7.4	5.0	4.1	4.5	4.0	3.1
Never married	12.9	15.5	10.4	9.4	9.7	5.1	2.3
Other marital status	9.2	13.1	10.0	9.2	8.9	7.6	4.9

Source: Hayghe, Howard V., and Steven E. Haugen, 1987, A profile of husbands in today's labor market, Monthly Labor Review 110(10):12-17, U.S. Department of Labor, Bureau of Labor Statistics.

Labor Force Characteristics of Married Men

Husbands (three of five men) have labor force characteristics different from those of other men. In almost all age groups, husbands are more likely to have completed high school than single or formerly married men (as shown below), and the more years of school completed, the more likely a man will be in the labor force.

Age (years)	Men having completed high school, 1987		
	Husbands	Single (percent)	Formerly married
20 to 24	78	85	67
25 to 34	87	86	80
35 to 44	87	82	84
45 to 54	79	68	73
55 to 64	69	54	53
65 and over ..	54	44	40

Employed husbands are more likely than other men to be in jobs associated with higher pay. In 1987 about half of all husbands worked in three occupational categories--precision production, craft, and repair (21%); executive, administrative, and managerial (16%); and the professional specialties (13%). For other men, the corresponding proportions were 18%, 9%, and 9%. This concentration is reflected in earnings; in 1986, about 46% of husbands who were full-time wage and salary workers had weekly earnings of \$500 or more, compared with 25% of other men.

For men, both unemployment and labor force participation generally peak early in the life cycle and then decline with age. Unemployment rates decline as persons accumulate work experience and settle in a career, whereas labor force participation rates usually remain high until health problems limit the ability to work or until retirement. Husbands are older, on average, than other men and their unemployment rates are much lower than those of other men (see table, p. 28). In contrast, husbands with children under 18 are, on average, younger than husbands without children; fathers typically have both higher labor force participation rates and higher unemployment rates than husbands without children.

The median age of Hispanic husbands in 1987 was 39 years, compared with 44 years for black and 45 years for white husbands. Reflecting their younger age, Hispanic husbands experience higher rates of unemployment (7.7% in March 1987) than do either black (6.9%) or white (4.3%) husbands and higher labor force participation rates than those of white and black husbands. However, the unemployment rate for young (16- to 24-year-old) black husbands is much higher than that for their white or Hispanic counterparts.

White husbands are more likely to work all year at full-time jobs and less likely to experience unemployment than blacks and Hispanics. Also, black and Hispanic husbands are concentrated in occupational categories that are typified by relatively low wages. About half the employed black and 40% of Hispanic husbands are either in service jobs or work as operators, fabricators, or laborers. In contrast, slightly fewer than one-fourth of white husbands are in such jobs. These two factors contribute to a higher median income in 1986 for married white couples (\$33,630) than for either black couples (\$26,780) or Hispanic couples (\$23,790).

In March 1987 about 56% of all husbands had wives in the labor force. Of those husbands who are employed, 63% have employed wives. This compares with 56% of unemployed husbands who have wives who are employed. When each spouse is employed, both the husband and wife tend to work in similar occupations, which influences family earnings. Earnings were generally highest (more than \$40,000) in families with both spouses in managerial or professional specialty occupations.

Husbands no longer constitute the majority of the labor force. This dramatic shift results from husbands' falling labor force participation rates, the rise in wives' participation, and changes in marital patterns resulting in increased numbers of divorced, separated, and never-married persons.

Source: Hayghe, Howard V., and Steven E. Haugen, 1987, A profile of husbands in today's labor market, Monthly Labor Review 110(10):12-17, U.S. Department of Labor, Bureau of Labor Statistics.

Hispanic Population in the United States

In March 1987 there were 18.8 million Hispanics in the United States,¹ an increase of 4.3 million persons (30%) since 1980. During the same period, the non-Hispanic population increased by only 6%. The Bureau of the Census has revised the estimating procedures for the Hispanic (Spanish) population by (1) adding an allowance for net undocumented immigration since 1980, and (2) increasing the estimate for emigration from the United States by legal residents. The first Census Bureau report that uses these adjusted figures compares demographic, social, and economic characteristics of the Hispanic and non-Hispanic populations in the eighties. Hispanic population totals from both the March 1986 and March 1987 Current Population Surveys (CPS) were adjusted, but not the data from the March 1982 CPS.

Subgroups of the Hispanic population are also described. Mexicans accounted for 63% (11.8 million persons) of the U.S. Spanish population. Puerto Ricans, Central or South Americans, Cubans, and other Hispanics² each constituted 5% to 12% of the Hispanic population (see table, p. 31). Among these subgroups, the highest rate of growth between 1982 and 1987 was found in the Central or South American population:

Growth rate between 1982 and 1987

	Percent
Central or South American.....	40
Other Hispanics	33
Mexicans	22
Puerto Ricans	11
Cubans.....	7

¹ Estimates are based on the civilian noninstitutional population and U.S. Armed Forces members and families who reside in the United States.

² "Other Hispanics" include those whose origins are from Spain, or they are persons of Spanish origin who identify themselves as Spanish, Spanish-American, Hispano, Latino, or the like.

Social and economic characteristics highlighted in the report are summarized below.

Educational Attainment

Hispanics' educational attainment has improved since 1982 but lags behind that of non-Hispanics. A greater proportion of Spanish persons age 25 years or older had completed at least 4 years of high school in 1987 than in 1982 (51%, compared with 45%). However, there was not a significant difference in the proportion of Hispanics age 25 years or older who had completed 4 or more years of college in 1982 and 1987. Non-Hispanics that completed 4 years or more of high school made comparable gains. Furthermore, unlike Hispanics, they also made gains in the proportion completing 4 or more years of college.

Family

The proportion of married-couple families among Hispanics was lower in 1987 than in 1982 (71%, compared with 74%). A similar change was evident for non-Hispanics. The proportions of families maintained by a man or a woman, with no spouse present, were larger in 1987 than in 1982 for both Hispanics and non-Hispanics.

Employment and Earnings

Employment rates among Hispanics and non-Hispanics 16 years or older increased between 1982 and 1987. However, the unemployment of Hispanics (10%) remained higher than that of non-Hispanics (7%).

Median earnings of Hispanic persons 15 years or older remained lower than those of non-Hispanics. In 1986 the median earnings of Hispanic men (\$11,958) was 61% of that of non-Hispanic men (\$19,588). Hispanic women's earnings were 82% of other women's earnings.

Income

After adjusting for inflation, no significant change was evident in the real money income of Hispanic families between 1981 and 1986. In contrast, non-Hispanic families experienced a 10% increase in real money income during this period. However, when 1982 (the final year of the most recent recession) is used as a base year, the real income of Spanish families shows a 9% increase (from \$18,321 to \$19,995 in 1986). Non-Hispanics experienced an 11% increase in

real median family income over the same post-recession period (not statistically different from the increase experienced by the Hispanic families).

Poverty

The poverty rate of Hispanic families was 24.7 in 1986, compared with a rate of 9.9 for non-Hispanic families. Even though the poverty rate has not changed significantly since 1981, the number of poor Hispanics increased by 24% between 1981 and 1986 because of population growth. Of the 1.1 million Hispanic families that were living

below the poverty level in 1986, 49% were maintained by women with no husbands present. About 62% of the Hispanic families below the poverty level in 1986 were headed by householders who had completed less than 4 years of high school.

Source: U.S. Department of Commerce, Bureau of the Census, 1987, The Hispanic Population in the United States: March 1986 and 1987 (Advanced Report), Current Population Reports, Population Characteristics, Series P-20, No. 416.

Characteristics of persons of Hispanic origin and non-Hispanic origin, March 1987

Characteristic	Non-Hispanic	Hispanic origin					
		Total	Mexican	Puerto Rican	Central or South American	Cuban	Other ¹ Hispanic
Total persons (thousands)...	219,999	18,790	11,762	2,284	2,139	1,017	1,588
Median age (years).....	32.6	25.1	23.5	24.3	27.3	35.8	30.9
Age (percent): ²							
Under 18 years.....	25.7	35.5	38.9	38.2	28.6	19.6	26.4
18 years and older	74.3	64.5	61.2	61.7	71.2	80.4	73.5
65 years and older	12.3	4.9	4.2	3.6	2.8	12.1	9.6
Male (percent)	48.5	50.1	51.6	46.4	47.0	50.3	48.4
Female (percent)	51.5	49.9	48.4	53.6	53.0	49.7	51.6
Family size (mean)	3.1	3.8	4.0	3.6	3.7	3.2	3.5
Labor force status:							
Total, 16 years and older (thousands)	170,320	12,772	7,642	1,499	1,581	839	1,212
Civilian labor force (thousands)	109,832	8,302	5,072	808	1,127	560	735
Percent	64.5	65.0	66.4	53.9	71.3	63.7	60.7
Unemployed (percent)	6.8	10.2	11.7	11.0	7.9	5.5	5.6
Median family income in 1986 (dollars)	30,231	19,995	19,326	14,584	22,246	26,770	22,240
Families below poverty level in 1986 (thousands)	5,938	1,085	649	226	97	39	75
Percent	9.9	24.7	24.9	38.1	18.7	13.3	19.4

¹"Other Hispanic" include those whose origins are from Spain, or they are persons of Spanish origin who identify themselves as Spanish-American, Hispano, Latino, or the like.

²Percentages may not add up to 100 due to rounding.

Source: U.S. Department of Commerce, Bureau of the Census, 1987, The Hispanic Population in the United States: March 1986 and 1987 (Advanced Report), Current Population Reports, Population Characteristics Series P-20, No. 416.

Recent Reports on Housing

PROGRAMS OF HUD

U.S. Department of Housing and Urban Development, 1987

This 116-page booklet, which is updated periodically, contains a brief description of each HUD program. Included is information on community planning and development, public and Indian housing, fair housing and equal opportunity, mortgage and loan insurance, housing for the handicapped, and policy development and research. Information is also included on two new programs, Rental Rehabilitation Housing Development and Housing Voucher Demonstration. Single copies of Programs of HUD, HUD-214-PA(13), are available free from HUD, Office of the Assistant Secretary for Public Affairs, Room 9246, 451 Seventh Street SW., Washington, DC 20410.

HOUSING AND DISABLED PEOPLE: A BASIC RIGHT

U.S. Department of Housing and Urban Development, 1985

Two of the three booklets in this information kit answer questions concerning the housing rights of disabled persons and their housing providers under Section 504 of the Rehabilitation Act of 1973. This Act prohibits discrimination by reason of handicap in programs or activities conducted by the Federal Government or receiving Federal financial assistance. The third booklet summarizes current HUD programs pertaining to the disabled and describes ways these programs can be utilized by persons with disabilities, as well as service providers, public officials, and others interested in facilitating the availability of housing opportunity for the disabled. The kit is free and may be obtained from the Special Adviser for Disability Issues, Office of Intergovernmental Relations, U.S. Department of Housing and Urban Development, Room 10140, 451 Seventh Street, SW., Washington, DC 20410.

HOUSING REHABILITATION: PROGRAMS, TECHNIQUES, AND RESOURCES

Hud User

U.S. Department of Housing and Urban Development, 1987

This new resource guide offers an overview of housing rehabilitation for both residences and commercial buildings in central cities, an important strategy for reversing urban decline. HUD documents, commercially published books, and journal articles are included. The guide covers general issues, Federal programs, rehabilitation technology, and historic preservation. Also provided is a list of organizations, journal titles, and other resources. The guide, PDR-1086, may be purchased for \$5 from HUD USER, P.O. Box 280, Germantown, MD 20874-0280.

HOME EQUITY CONVERSION MECHANISMS

Hud User

U.S. Department of Housing and Urban Development, 1985

Various means by which the elderly can generate cash-flow from their home equity while remaining in their homes are examined. This 129-page report also discusses the potential size of the home equity conversion market among the elderly, develops a reverse mortgage pricing model, and examines tax issues involved in constructing a valid sale-leaseback. Home Equity Conversion Mechanisms, PDR-1017, may be purchased for \$5 from HUD USER (address above).

AMERICAN HOUSING SURVEY, 1982 and 1983-- SUMMARY OF HOUSING CHARACTERISTICS FOR SELECTED METROPOLITAN AREAS

Hud User

U.S. Department of Housing and Urban Development, 1986

These two supplementary reports, one covering 1982 (109 pp.) and the other 1983 (110 pp.), present summary statistics on housing and household characteristics from the American Housing Survey (AHS). Information is provided for the United States, for the four geographic regions, and for 15

Standard Metropolitan Statistical Areas. Included are data on financial characteristics and neighborhood characteristics for owner- and renter-occupied housing units, selected characteristics of new construction units, characteristics of housing units removed from the inventory, and selected characteristics of housing units occupied by recent movers. Both summaries include data tables (for all races, for black householders, and for Hispanic householders), methodological data, definitions and explanations of subject characteristics, maps, and a facsimile of the housing survey questionnaire. American Housing Survey Supplementary Report No. 1: 1982, RP4671, and American Housing Survey Supplementary Report No. 1: 1983, RP4672, may be purchased for \$13 each from HUD USER (address above).

NCR Research Publication

To what extent has home economics research contributed to improving the well-being of families and individuals? This question is often asked by administrators and policy makers. In 1982 the Research Committee of the North Central Association of Experiment Station Directors¹ approved the establishment of a regional research committee (NCR-133) on home economics research evaluation. This committee was directed to critically examine the components and methodologies of research evaluation and to develop a written account of its deliberations.

A framework, utilizing both quantitative and qualitative measures, was developed to encourage and assist home economics researchers in designing and reporting studies so that the impact of the research on family and individual well-being is more easily identified. A monolith describing this framework, *Home Economics Research Impacts: Framework for Evaluation*, Research Bulletin No. 1182, has been published by the Ohio Agricultural Research and Development Center. For information on obtaining copies of this publication, call Justin Besancon, 216-263-3775, or write to: Ohio Agricultural Research and Development Center, The Ohio State University, 1680 Madison Avenue, Wooster, Ohio 44691-4096.

¹ Agricultural Experiment Stations of Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin, and the U.S. Department of Agriculture cooperating.

New Publications

The following are for sale from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. (202)783-3238:

- **Fact Book of United States Agriculture, 1987.** August 1987. MP-1063. SN001-000-04496-6. \$4.25.
- **Yearbook of Agriculture. Our American Land.** November 1987. SN001-000-04494-0. \$9.50.

The following is available free from the Consumer Information Center. Write to Consumer Information Center, Dept. 582T, Pueblo, CO 81009.

- **Consumer's Resource Handbook.** 1988 Edition.

Single copies of the following are available free from the U.S. Department of Agriculture, Agricultural Research Service, Room 227, Building 003, Beltsville, MD 20705:

- **The Beltsville Agricultural Research Center--And Other Beltsville Area Research Activities.** Program Aid No. 1389.

* * * * *

- **Major Statistical Series of the United States Department of Agriculture.** AH-671
Agriculture and Rural Economy Division
Economic Research Service

The Economics Research Service, USDA, is updating its handbook Major Statistical Series of the U.S. Department of Agriculture for the first time since 1972. Originally published during the period 1957-60, each volume of the handbook will include changes and a description of that particular series, and identification of some titles in that series that are no longer published. The first 3 volumes of the 12-volume set are now available from the Superintendent of

Documents, U.S. Government Printing Office, Washington, DC 20402, as follows:

- **Major Statistical Series of the United States, Vol. 4: Agricultural Marketing Costs and Charges.** SN-001-019-001523-8. \$2.00.
- **Major Statistical Series of the United States, Vol. 10: International Agricultural Statistics.** SN-001-019-00525-4. \$1.50.
- **Major Statistical Series of the United States, Vol. 12: Costs of Production.** SN-001-019-00533-5. \$1.25.

The complete 12-volume set can be ordered for \$20 from the Economic Research Service, USDA, Room 208, 1301 New York Avenue, NW., Washington, DC 20005-4778, (202)786-1512. Individual volumes will be sent as published; the complete set will include the following:

- Agricultural Prices.
- Agricultural Production and Efficiency.
- Farm Income.
- Agricultural Marketing Costs and Charges
- Consumption and Utilization of Agricultural Products
- Land Values and Land Use
- Crop and Livestock Estimates
- Farmer Cooperatives
- Market News
- International Agricultural Statistics
- The Balance Sheet and Farm Finance
- Costs of Production.

Cost of Food at Home

Cost of food at home estimated for food plans at 4 cost levels, February 1988, U.S. average ¹

Sex-age group	Cost for 1 week				Cost for 1 month			
	Thrifty plan	Low-cost plan	Moderate-cost plan	Liberal plan	Thrifty plan	Low-cost plan	Moderate-cost plan	Liberal plan
FAMILIES								
Family of 2: ²								
20-50 years	\$40.60	\$51.50	\$63.70	\$79.30	\$175.90	\$223.10	\$276.00	\$343.70
51 years and over	38.40	49.30	61.20	73.40	166.30	213.80	265.00	317.60
Family of 4:								
Couple, 20-50 years and children--								
1-2 and 3-5 years	58.90	73.90	90.50	111.30	255.40	320.10	392.00	482.50
6-8 and 9-11 years	67.60	86.90	103.90	131.40	292.90	376.50	471.90	569.30
INDIVIDUALS ³								
Child:								
1-2 years	10.60	12.90	15.10	18.20	45.90	55.90	65.30	78.90
3-5 years	11.40	14.20	17.50	21.00	49.60	61.40	75.80	91.10
6-8 years	14.00	18.80	23.50	27.50	60.80	81.30	101.90	119.00
9-11 years	16.70	21.30	27.50	31.80	72.20	92.40	119.10	137.80
Male:								
12-14 years	17.40	24.20	30.20	35.50	75.50	104.80	131.10	154.00
15-19 years	18.00	25.10	31.20	36.10	78.10	108.60	135.10	156.40
20-50 years	19.40	24.90	31.20	37.80	83.90	107.80	135.30	163.80
51 years and over	17.60	23.60	29.20	35.10	76.10	102.50	126.60	152.00
Female:								
12-19 years	17.40	20.90	25.50	30.90	75.30	90.70	110.50	133.80
20-50 years	17.50	21.90	26.70	34.30	76.00	95.00	115.60	148.70
51 years and over	17.30	21.20	26.40	31.60	75.10	91.90	114.30	136.70

¹ Assumes that food for all meals and snacks is purchased at the store and prepared at home. Estimates for the thrifty food plan were computed from quantities of foods published in Family Economics Review, 1984(1). Estimates for the other plans were computed from quantities of foods published in Family Economics Review, 1983(2). The costs of the food plans are estimates based on surveying prices paid by households surveyed in 1977-78 in USDA's Nationwide Food Consumption Survey. USDA updates these survey prices using information from the Bureau of Labor Statistics, CPI Detailed Report, table 3, to estimate the costs for the food plans.

² 10 percent added for family size adjustment. See footnote 3.

³ The costs given are for individuals in 4-person families. For individuals in other size families, the following adjustments are suggested: 1-person--add 20 percent; 2-person--add 10 percent; 3-person--add 5 percent; 5- or 6-person--subtract 5 percent; 7- or more-person--subtract 10 percent.

Updated Estimates of the Cost of Raising a Child

The cost of raising urban children: 1987 annual average; moderate-cost level¹

Region and age of child (years)	Total	Food at home ²	Food away from home	Clothing	Housing ³	Medical care	Educa-tion	Transpor-tation	All other ⁴
MIDWEST:									
Under 1	\$4,699	\$613	\$0	\$148	\$2,016	\$343	\$0	\$874	\$705
1	4,838	752	0	148	2,016	343	0	874	705
2-3	4,505	752	0	241	1,771	343	0	761	637
4-5	4,774	863	158	241	1,771	343	0	761	637
6	5,013	836	158	334	1,680	343	163	761	738
7-9	5,207	1,030	158	334	1,680	343	163	761	738
10-11	5,402	1,225	158	334	1,680	343	163	761	738
12	5,762	1,253	189	483	1,741	343	163	818	772
13-15	5,902	1,393	189	483	1,741	343	163	818	772
16-17	6,466	1,560	189	668	1,802	343	163	902	839
Total	95,933	19,523	2,398	6,532	31,764	6,174	1,956	14,434	13,152
NORTHEAST:									
Under 1	4,659	724	0	148	2,046	343	0	761	637
1	4,826	891	0	148	2,046	343	0	761	637
2-3	4,705	863	0	260	1,863	343	0	705	671
4-5	4,975	975	158	260	1,863	343	0	705	671
6	5,373	975	189	353	1,832	343	204	705	772
7-9	5,568	1,170	189	353	1,832	343	204	705	772
10-11	5,818	1,420	189	353	1,832	343	204	705	772
12	6,163	1,420	189	520	1,893	343	204	789	805
13-15	6,330	1,587	189	520	1,893	343	204	789	805
16-17	6,782	1,755	221	650	1,924	343	204	846	839
Total	101,275	22,307	2,648	6,834	33,956	6,174	2,448	13,420	13,488
SOUTH:									
Under 1	5,120	668	0	167	2,168	382	0	930	805
1	5,260	808	0	167	2,168	382	0	930	805
2-3	4,936	780	0	260	1,924	382	0	818	772
4-5	5,177	863	158	260	1,924	382	0	818	772
6	5,521	863	189	353	1,832	382	245	818	839
7-9	5,688	1,030	189	353	1,832	382	245	818	839
10-11	5,911	1,253	189	353	1,832	382	245	818	839
12	6,294	1,253	221	520	1,893	382	245	874	906
13-15	6,461	1,420	221	520	1,893	382	245	874	906
16-17	6,928	1,560	221	668	1,955	382	245	958	939
Total	104,546	19,854	2,776	6,908	34,506	6,876	2,940	15,452	15,234
WEST:									
Under 1	5,045	668	0	148	2,107	420	0	930	772
1	5,213	836	0	148	2,107	420	0	930	772
2-3	4,952	808	0	241	1,893	420	0	818	772
4-5	5,252	919	189	241	1,893	420	0	818	772
6	5,670	891	221	353	1,863	420	204	846	872
7-9	5,865	1,086	221	353	1,863	420	204	846	872
10-11	6,116	1,337	221	353	1,863	420	204	846	872
12	6,443	1,337	221	501	1,924	420	204	930	906
13-15	6,582	1,476	221	501	1,924	420	204	930	906
16-17	7,216	1,671	252	631	2,016	420	204	1,015	1,007
Total	106,784	20,888	3,092	6,644	34,692	7,560	2,448	15,958	15,502

¹Annual cost of raising a child from birth to age 18, by age, in a husband-wife family with no more than 5 children. For more information on these and additional child cost estimates, see USDA Miscellaneous Publication No. 1411, "USDA Estimates of the Cost of Raising a Child: A Guide to Their Use and Interpretation," by Carolyn S. Edwards, Family Economics Research Group, Agricultural Research Service, USDA.

²Includes home-produced food and school lunches.

³Includes shelter, fuel, utilities, household operations, furnishings, and equipment.

⁴Includes personal care, recreation, reading, and other miscellaneous expenditures.

The cost of raising rural nonfarm children: 1987 annual average; moderate-cost level ¹

Region and age of child (years)	Total	Food at home ²	Food away from home	Clothing	Housing ³	Medical care	Educational	Transportation	All other ⁴
MIDWEST:									
Under 1	\$4,437	\$557	\$0	\$130	\$1,924	\$343	\$0	\$846	\$637
1	4,576	696	0	130	1,924	343	0	846	637
2-3	4,071	668	0	204	1,619	305	0	705	570
4-5	4,309	780	126	204	1,619	305	0	705	570
6	4,680	780	158	316	1,588	305	163	733	637
7-9	4,847	947	158	316	1,588	305	163	733	637
10-11	5,070	1,170	158	316	1,588	305	163	733	637
12	5,451	1,170	158	483	1,649	305	163	818	705
13-15	5,590	1,309	158	483	1,649	305	163	818	705
16-17	6,001	1,448	189	594	1,680	343	163	846	738
Total	89,357	18,103	2,210	6,092	29,808	5,642	1,956	13,874	11,672
NORTHEAST:									
Under 1	5,153	668	0	148	2,168	343	0	987	839
1	5,293	808	0	148	2,168	343	0	987	839
2-3	5,056	780	0	241	1,985	343	0	902	805
4-5	5,356	891	189	241	1,985	343	0	902	805
6	5,782	891	221	353	1,955	343	245	902	872
7-9	5,949	1,058	221	353	1,955	343	245	902	872
10-11	6,200	1,309	221	353	1,955	343	245	902	872
12	6,569	1,309	221	538	2,016	343	245	958	939
13-15	6,736	1,476	221	538	2,016	343	245	958	939
16-17	7,315	1,643	252	705	2,077	343	245	1,043	1,007
Total	108,706	20,524	3,092	6,940	36,224	6,174	2,940	16,912	15,900
SOUTH:									
Under 1	5,318	668	0	167	2,168	382	0	1,128	805
1	5,430	780	0	167	2,168	382	0	1,128	805
2-3	4,925	752	0	260	1,863	382	0	930	738
4-5	5,225	863	189	260	1,863	382	0	930	738
6	5,473	836	189	353	1,802	382	204	902	805
7-9	5,640	1,003	189	353	1,802	382	204	902	805
10-11	5,862	1,225	189	353	1,802	382	204	902	805
12	6,292	1,225	221	538	1,863	382	204	987	872
13-15	6,432	1,365	221	538	1,863	382	204	987	872
16-17	6,973	1,532	252	761	1,893	382	204	1,043	906
Total	104,699	19,357	2,900	7,166	33,838	6,876	2,448	17,422	14,692
WEST:									
Under 1	5,536	668	0	148	2,199	420	0	1,128	973
1	5,676	808	0	148	2,199	420	0	1,128	973
2-3	5,126	780	0	241	1,893	382	0	958	872
4-5	5,426	891	189	241	1,893	382	0	958	872
6	5,882	863	189	371	1,863	420	245	958	973
7-9	6,077	1,058	189	371	1,863	420	245	958	973
10-11	6,300	1,281	189	371	1,863	420	245	958	973
12	6,731	1,281	221	557	1,924	420	245	1,043	1,040
13-15	6,898	1,448	221	557	1,924	420	245	1,043	1,040
16-17	7,547	1,643	252	650	2,046	420	245	1,184	1,107
Total	111,548	20,328	2,900	7,014	34,936	7,408	2,940	18,376	17,646

¹ Annual cost of raising a child from birth to age 18, by age, in a husband-wife family with no more than 5 children. For more information on these and additional child cost estimates, see USDA Miscellaneous Publication No. 1411, "USDA Estimates of the Cost of Raising a Child: A Guide to Their Use and Interpretation," by Carolyn S. Edwards, Family Economics Research Group, Agricultural Research Service, USDA.

² Includes home-produced food and school lunches.

³ Includes shelter, fuel, utilities, household operations, furnishings, and equipment.

⁴ Includes personal care, recreation, reading, and other miscellaneous expenditures.

Consumer Prices

Consumer Price Index for all urban consumers [1982-84 = 100, unless otherwise noted]

Group	Unadjusted indexes			
	Mar. 1988	Feb. 1988	Jan. 1988	Mar. 1987
All items	116.5	116.0	115.7	112.1
Food	115.9	115.7	115.7	112.5
Food at home.....	113.9	113.9	114.1	110.9
Food away from home.....	120.2	119.7	119.3	115.9
Housing	117.0	116.6	116.2	112.8
Shelter.....	125.6	125.0	124.6	119.6
Renters' costs	132.9	131.3	130.8	126.4
Rent, residential	126.4	126.3	126.0	121.8
Homeowners' costs	129.2	129.0	128.5	123.0
Maintenance and repairs	113.3	114.3	113.7	110.7
Maintenance and repair services	116.4	117.9	117.4	113.4
Maintenance and repair commodities ..	109.2	109.5	108.7	107.1
Fuel and other utilities	102.7	102.8	102.4	101.5
Fuel oil and other household fuel				
commodities.....	80.5	80.9	80.8	77.5
Gas (piped) and electricity	101.7	101.9	101.5	101.5
Household furnishings and operation.....	108.3	107.7	107.5	106.8
Housefurnishings	104.7	103.7	103.5	103.6
Housekeeping supplies.....	112.9	113.2	113.1	110.9
Housekeeping services.....	111.7	111.6	111.5	109.9
Apparel and upkeep	114.3	110.2	110.4	109.7
Apparel commodities	112.7	108.3	108.6	108.1
Men's and boys' apparel	111.6	109.1	109.0	108.0
Women's and girls' apparel	115.3	107.8	108.2	109.6
Infants' and toddlers' apparel	114.0	111.4	113.6	114.3
Footwear	107.3	105.8	106.1	104.5
Apparel services	122.2	122.0	121.6	118.6
Transportation	106.5	106.8	107.1	103.3
Private transportation	105.4	105.7	106.0	102.0
New vehicles	115.7	116.0	116.1	113.1
Used cars	116.1	116.0	116.0	108.7
Motor fuel.....	77.5	78.3	79.7	76.6
Maintenance and repairs.....	118.5	117.7	117.2	113.3
Public transportation	121.4	120.8	121.8	121.1
Medical care.....	136.3	135.5	134.4	128.1
Medical care commodities.....	137.0	136.1	135.4	128.5
Medical care services	136.1	135.3	134.1	128.0
Professional services	135.4	134.5	133.2	126.6
Entertainment	119.0	118.3	118.1	113.9
Other goods and services.....	134.6	134.2	133.4	126.3
Personal care.....	118.1	117.8	117.3	113.9
Personal and educational expenses	145.0	144.7	143.9	135.8

Source: U.S. Department of Labor, Bureau of Labor Statistics.

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Highlights

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Clothing and Textile Trends

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1987 Food Consumption Survey